

ABSTRACT OF THE DISCLOSURE

In one aspect a substrate such as a sheet metal product, in particular for use as a bipolar plate in a fuel cell or in an electrolyzer, is characterized in that it has, on at least one side, a conductive and corrosion-resistant protective coating of a metal oxide having a treatment which ensures the conductivity. The coating can be produced by introducing a piece of sheet metal into a coating plant and providing it with the conductive and corrosion-resistant protective coating of the metal oxide. In another aspect, an electrochemical cell such as a fuel cell comprises an electrically conductive contact element having a first surface facing an electrode for conducting electrical current, and the contact element comprises an electrically conductive substrate and an electrically conductive coating comprising a doped metal oxide, desirably a doped tin oxide, and preferably a fluorine doped tin oxide.